

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/572,796  
Source: IFWP  
Date Processed by STIC: 03/30/2006

# ***ENTERED***

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/572, 796

CRF Edit Date: 03/30/2006  
Edited by: DA

\_\_\_ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

\_\_\_ Corrected the SEQ ID NO. Sequence numbers edited were:

\_\_\_\_\_

\_\_\_ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

\_\_\_\_\_

\_\_\_ Deleted: \_\_\_ invalid beginning/end-of-file text ; \_\_\_ page numbers

\_\_\_ Inserted mandatory headings/numeric identifiers, specifically:

\_\_\_\_\_

\_\_\_ Moved responses to same line as heading/numeric identifier, specifically:

\_\_\_\_\_

\_\_\_ Other: Corrected the Spelling of (Artificial)

\_\_\_\_\_

\_\_\_\_\_



IFWP

## RAW SEQUENCE LISTING

DATE: 03/30/2006

PATENT APPLICATION: US/10/572,796

TIME: 10:06:43

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\03302006\J572796.raw

```

4 <110> APPLICANT: Steinkuhler, Christian
5      Lahm, Armin
6      Pallaoro, Michele
7      Nardella, Caterina
9 <120> TITLE OF INVENTION: SYNTHETIC HEPARANASE MOLECULES AND USES
10     THEREOF
12 <130> FILE REFERENCE: ITR0060YP
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/572,796
C--> 14 <141> CURRENT FILING DATE: 2006-03-21
14 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/010517
15 <151> PRIOR FILING DATE: 2004-09-17
17 <150> PRIOR APPLICATION NUMBER: 60/537,729
18 <151> PRIOR FILING DATE: 2004-01-20
20 <150> PRIOR APPLICATION NUMBER: 60/506,479
21 <151> PRIOR FILING DATE: 2003-09-26
23 <160> NUMBER OF SEQ ID NOS: 44
25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 40
29 <212> TYPE: DNA
30 <213> ORGANISM: Artificial Sequence
32 <220> FEATURE:
33 <223> OTHER INFORMATION: PCR Primer
35 <400> SEQUENCE: 1
36 cgggatccgc cgcaccatgc tgctgcgctc gaagcctgcg          40
38 <210> SEQ ID NO: 2
39 <211> LENGTH: 24
40 <212> TYPE: DNA
41 <213> ORGANISM: Artificial Sequence
43 <220> FEATURE:
44 <223> OTHER INFORMATION: PCR Primer
46 <400> SEQUENCE: 2
47 tcagatgcaa gcagcaactt tggc          24
49 <210> SEQ ID NO: 3
50 <211> LENGTH: 48
51 <212> TYPE: DNA
52 <213> ORGANISM: Artificial Sequence
54 <220> FEATURE:
55 <223> OTHER INFORMATION: PCR Primer
57 <400> SEQUENCE: 3
58 ctaattttcg atcccaagaa ggaaaaaaag ttcaagaaca gcacctac      48
60 <210> SEQ ID NO: 4
61 <211> LENGTH: 51

```

## RAW SEQUENCE LISTING

DATE: 03/30/2006

PATENT APPLICATION: US/10/572,796

TIME: 10:06:43

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\03302006\J572796.raw

```

62 <212> TYPE: DNA
63 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: PCR Primer
68 <400> SEQUENCE: 4
69 aagacagact tcctaatttt cgatcccaaa aagttcaaga acagcaccta c          51
71 <210> SEQ ID NO: 5
72 <211> LENGTH: 57
73 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <223> OTHER INFORMATION: PCR Primer
79 <400> SEQUENCE: 5
80 ctaattttcg atcccaagaa ggaaggtagc ggttccggct ctaaaaagtt caagaac      57
82 <210> SEQ ID NO: 6
83 <211> LENGTH: 87
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: PCR Primer
90 <400> SEQUENCE: 6
91 ctaattttcg atcccaagaa ggaaggtagc ggcgctggat caggggcagc aggatccggc 60
92 gccaaaaagt tcaagaacag cacctac          87
94 <210> SEQ ID NO: 7
95 <211> LENGTH: 72
96 <212> TYPE: DNA
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: PCR Primer
102 <400> SEQUENCE: 7
103 acctttgaag agagaagtta ctgggggttca ggggcaggat ccggcgccga atggccctac 60
104 caggagcaat tg          72
106 <210> SEQ ID NO: 8
107 <211> LENGTH: 8
108 <212> TYPE: PRT
109 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: Peptide
114 <400> SEQUENCE: 8
115 Trp Ala Phe Lys Asp Lys Pro Thr
116 1          5
119 <210> SEQ ID NO: 9
120 <211> LENGTH: 69
121 <212> TYPE: DNA
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: PCR Primer
127 <400> SEQUENCE: 9
128 acctttgaag agagaagtta ctgggccttc aaggacaaga cccccgaatg gccctaccag 60

```

## RAW SEQUENCE LISTING

DATE: 03/30/2006

PATENT APPLICATION: US/10/572,796

TIME: 10:06:43

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\03302006\J572796.raw

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129 gagcaattg 69
131 <210> SEQ ID NO: 10
132 <211> LENGTH: 15
133 <212> TYPE: PRT
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Peptide
139 <400> SEQUENCE: 10
140 Glu Gly Ser Gly Ser Glu Asn Leu Tyr Phe Gln Gly Ser Gly Gly
141 1 5 10 15
144 <210> SEQ ID NO: 11
145 <211> LENGTH: 63
146 <212> TYPE: DNA
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: PCR Primer
152 <400> SEQUENCE: 11
153 ggcagcggat ctgagaacct gtacttccag gggtccgggt caacctttga agagagaagt 60
154 tac 63
156 <210> SEQ ID NO: 12
157 <211> LENGTH: 16
158 <212> TYPE: PRT
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Peptide
164 <400> SEQUENCE: 12
165 Gln Gly Ser Gly Ser Glu Asn Leu Tyr Phe Gln Gly Ser Gly Ser Lys
166 1 5 10 15
169 <210> SEQ ID NO: 13
170 <211> LENGTH: 66
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: PCR Primer
177 <400> SEQUENCE: 13
178 tctggatccg gtgaaaatct ctattttcag ggctcaggaa gtaaaaagtt caagaacagc 60
179 acctac 66
181 <210> SEQ ID NO: 14
182 <211> LENGTH: 17
183 <212> TYPE: PRT
184 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
187 <223> OTHER INFORMATION: Peptide
189 <400> SEQUENCE: 14
190 Glu Pro Asn Ser Phe Leu Lys Lys Ala Asp Ile Phe Ile Asn Gly Ser
191 1 5 10 15
192 Gln
196 <210> SEQ ID NO: 15
197 <211> LENGTH: 74

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## RAW SEQUENCE LISTING

DATE: 03/30/2006

PATENT APPLICATION: US/10/572,796

TIME: 10:06:43

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\03302006\J572796.raw

```

198 <212> TYPE: PRT
199 <213> ORGANISM: Human
201 <400> SEQUENCE: 15
202 Gln Asp Val Val Asp Leu Asp Phe Phe Thr Gln Glu Pro Leu His Leu
203 1 5 10 15
204 Val Ser Pro Ser Phe Leu Ser Val Thr Ile Asp Ala Asn Leu Ala Thr
205 20 25 30
206 Asp Pro Arg Phe Leu Ile Leu Leu Gly Ser Pro Lys Leu Arg Thr Leu
207 35 40 45
208 Ala Arg Gly Leu Ser Pro Ala Tyr Leu Arg Phe Gly Gly Thr Lys Thr
209 50 55 60
210 Asp Phe Leu Ile Phe Asp Pro Lys Lys Glu
211 65 70
214 <210> SEQ ID NO: 16
215 <211> LENGTH: 386
216 <212> TYPE: PRT
217 <213> ORGANISM: Human
219 <400> SEQUENCE: 16
220 Lys Lys Phe Lys Asn Ser Thr Tyr Ser Arg Ser Ser Val Asp Val Leu
221 1 5 10 15
222 Tyr Thr Phe Ala Asn Cys Ser Gly Leu Asp Leu Ile Phe Gly Leu Asn
223 20 25 30
224 Ala Leu Leu Arg Thr Ala Asp Leu Gln Trp Asn Ser Ser Asn Ala Gln
225 35 40 45
226 Leu Leu Leu Asp Tyr Cys Ser Ser Lys Gly Tyr Asn Ile Ser Trp Glu
227 50 55 60
228 Leu Gly Asn Glu Pro Asn Ser Phe Leu Lys Lys Ala Asp Ile Phe Ile
229 65 70 75 80
230 Asn Gly Ser Gln Leu Gly Glu Asp Phe Ile Gln Leu His Lys Leu Leu
231 85 90 95
232 Arg Lys Ser Thr Phe Lys Asn Ala Lys Leu Tyr Gly Pro Asp Val Gly
233 100 105 110
234 Gln Pro Arg Arg Lys Thr Ala Lys Met Leu Lys Ser Phe Leu Lys Ala
235 115 120 125
236 Gly Gly Glu Val Ile Asp Ser Val Thr Trp His His Tyr Tyr Leu Asn
237 130 135 140
238 Gly Arg Thr Ala Thr Arg Glu Asp Phe Leu Asn Pro Asp Val Leu Asp
239 145 150 155 160
240 Ile Phe Ile Ser Ser Val Gln Lys Val Phe Gln Val Val Glu Ser Thr
241 165 170 175
242 Arg Pro Gly Lys Lys Val Trp Leu Gly Glu Thr Ser Ser Ala Tyr Gly
243 180 185 190
244 Gly Gly Ala Pro Leu Leu Ser Asp Thr Phe Ala Ala Gly Phe Met Trp
245 195 200 205
246 Leu Asp Lys Leu Gly Leu Ser Ala Arg Met Gly Ile Glu Val Val Met
247 210 215 220
248 Arg Gln Val Phe Phe Gly Ala Gly Asn Tyr His Leu Val Asp Glu Asn
249 225 230 235 240
250 Phe Asp Pro Leu Pro Asp Tyr Trp Leu Ser Leu Leu Phe Lys Lys Leu

```

## RAW SEQUENCE LISTING

DATE: 03/30/2006

PATENT APPLICATION: US/10/572,796

TIME: 10:06:43

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\03302006\J572796.raw

```

251          245          250          255
252 Val Gly Thr Lys Val Leu Met Ala Ser Val Gln Gly Ser Lys Arg Arg
253          260          265          270
254 Lys Leu Arg Val Tyr Leu His Cys Thr Asn Thr Asp Asn Pro Arg Tyr
255          275          280          285
256 Lys Glu Gly Asp Leu Thr Leu Tyr Ala Ile Asn Leu His Asn Val Thr
257          290          295          300
258 Lys Tyr Leu Arg Leu Pro Tyr Pro Phe Ser Asn Lys Gln Val Asp Lys
259 305          310          315          320
260 Tyr Leu Leu Arg Pro Leu Gly Pro His Gly Leu Leu Ser Lys Ser Val
261          325          330          335
262 Gln Leu Asn Gly Leu Thr Leu Lys Met Val Asp Asp Gln Thr Leu Pro
263          340          345          350
264 Pro Leu Met Glu Lys Pro Leu Arg Pro Gly Ser Ser Leu Gly Leu Pro
265          355          360          365
266 Ala Phe Ser Tyr Ser Phe Phe Val Ile Arg Asn Ala Lys Val Ala Ala
267          370          375          380
268 Cys Ile
269 385
272 <210> SEQ ID NO: 17
273 <211> LENGTH: 492
274 <212> TYPE: PRT
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: hep 106
280 <400> SEQUENCE: 17
281 Met Leu Leu Arg Ser Lys Pro Ala Leu Pro Pro Pro Leu Met Leu Leu
282 1          5          10          15
283 Leu Leu Gly Pro Leu Gly Pro Leu Ser Pro Gly Ala Leu Pro Arg Pro
284          20          25          30
285 Ala Gln Ala Gln Asp Val Val Asp Leu Asp Phe Phe Thr Gln Glu Pro
286          35          40          45
287 Leu His Leu Val Ser Pro Ser Phe Leu Ser Val Thr Ile Asp Ala Asn
288          50          55          60
289 Leu Ala Thr Asp Pro Arg Phe Leu Ile Leu Leu Gly Ser Pro Lys Leu
290 65          70          75          80
291 Arg Thr Leu Ala Arg Gly Leu Ser Pro Ala Tyr Leu Arg Phe Gly Gly
292          85          90          95
293 Thr Lys Thr Asp Phe Leu Ile Phe Asp Pro Lys Lys Phe Lys Asn Ser
294          100          105          110
295 Thr Tyr Ser Arg Ser Ser Val Asp Val Leu Tyr Thr Phe Ala Asn Cys
296          115          120          125
297 Ser Gly Leu Asp Leu Ile Phe Gly Leu Asn Ala Leu Leu Arg Thr Ala
298          130          135          140
299 Asp Leu Gln Trp Asn Ser Ser Asn Ala Gln Leu Leu Asp Tyr Cys
300 145          150          155          160
301 Ser Ser Lys Gly Tyr Asn Ile Ser Trp Glu Leu Gly Asn Glu Pro Asn
302          165          170          175
303 Ser Phe Leu Lys Lys Ala Asp Ile Phe Ile Asn Gly Ser Gln Leu Gly

```

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/572,796

DATE: 03/30/2006

TIME: 10:06:45

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\03302006\J572796.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date



**Raw Sequence Listing before editing,  
for reference only**



IFWP

## RAW SEQUENCE LISTING

DATE: 03/29/2006

PATENT APPLICATION: US/10/572,796

TIME: 09:49:42

Input Set : A:\ITR0060YP SEQLIST.TXT

Output Set: N:\CRF4\03292006\J572796.raw

4 <110> APPLICANT: Steinkuhler, Christian  
 5       Lahm, Armin  
 6       Pallaoro, Michele  
 7       Nardella, Caterina  
 9 <120> TITLE OF INVENTION: SYNTHETIC HEPARANASE MOLECULES AND USES  
 10       THEREOF  
 12 <130> FILE REFERENCE: ITR0060YP  
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/572,796  
 C--> 14 <141> CURRENT FILING DATE: 2006-03-21  
 14 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/010517  
 15 <151> PRIOR FILING DATE: 2004-09-17  
 17 <150> PRIOR APPLICATION NUMBER: 60/537,729  
 18 <151> PRIOR FILING DATE: 2004-01-20  
 20 <150> PRIOR APPLICATION NUMBER: 60/506,479  
 21 <151> PRIOR FILING DATE: 2003-09-26  
 23 <160> NUMBER OF SEQ ID NOS: 44  
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 27 <210> SEQ ID NO: 1  
 28 <211> LENGTH: 40  
 29 <212> TYPE: DNA  
 C--> 30 <213> ORGANISM: ~~Artificial Sequence~~ *deleted*  
 32 <220> FEATURE:  
 33 <223> OTHER INFORMATION: PCR Primer  
 35 <400> SEQUENCE: 1  
 36 cgggatccgc cgcaccatgc tgctgcgctc gaagcctgcg 40  
 38 <210> SEQ ID NO: 2  
 39 <211> LENGTH: 24  
 40 <212> TYPE: DNA  
 41 <213> ORGANISM: Artificial Sequence  
 43 <220> FEATURE:  
 44 <223> OTHER INFORMATION: PCR Primer  
 46 <400> SEQUENCE: 2  
 47 tcagatgcaa gcagcaactt tggc 24  
 49 <210> SEQ ID NO: 3  
 50 <211> LENGTH: 48  
 51 <212> TYPE: DNA  
 52 <213> ORGANISM: Artificial Sequence  
 54 <220> FEATURE:  
 55 <223> OTHER INFORMATION: PCR Primer  
 57 <400> SEQUENCE: 3  
 58 ctaattttcg atcccaagaa ggaaaaaaag ttcaagaaca gcacctac 48  
 60 <210> SEQ ID NO: 4  
 61 <211> LENGTH: 51

Does Not Comply  
Corrected Diskette Needed  
(CP5-1)

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,796

DATE: 03/29/2006

TIME: 09:49:42

Input Set : A:\ITR0060YP SEQLIST.TXT

Output Set: N:\CRF4\03292006\J572796.raw

```

62 <212> TYPE: DNA
63 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: PCR Primer
68 <400> SEQUENCE: 4
69 aagacagact tcctaatttt cgatcccaaa aagttcaaga acagcaccta c          51
71 <210> SEQ ID NO: 5
72 <211> LENGTH: 57
73 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <223> OTHER INFORMATION: PCR Primer
79 <400> SEQUENCE: 5
80 ctaattttcg atcccaagaa ggaaggtagc ggttcggct ctaaaaagtt caagaac      57
82 <210> SEQ ID NO: 6
83 <211> LENGTH: 87
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: PCR Primer
90 <400> SEQUENCE: 6
91 ctaattttcg atcccaagaa ggaaggtagc ggcgctggat caggggcagc aggatccggc 60
92 gccaaaaagt tcaagaacag cacctac          87
94 <210> SEQ ID NO: 7
95 <211> LENGTH: 72
96 <212> TYPE: DNA
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: PCR Primer
102 <400> SEQUENCE: 7
103 acctttgaag agagaagtta ctggggttca ggggcaggat cgggcgccga atggccctac 60
104 caggagcaat tg          72
106 <210> SEQ ID NO: 8
107 <211> LENGTH: 8
108 <212> TYPE: PRT
109 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: Peptide
114 <400> SEQUENCE: 8
115 Trp Ala Phe Lys Asp Lys Pro Thr
116 1          5
119 <210> SEQ ID NO: 9
120 <211> LENGTH: 69
121 <212> TYPE: DNA
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: PCR Primer
127 <400> SEQUENCE: 9
128 acctttgaag agagaagtta ctgggccttc aaggacaaga cccccgaatg gccctaccag 60

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,796

DATE: 03/29/2006

TIME: 09:49:42

Input Set : A:\ITR0060YP SEQLIST.TXT

Output Set: N:\CRF4\03292006\J572796.raw

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129 gagcaattg 69
131 <210> SEQ ID NO: 10
132 <211> LENGTH: 15
133 <212> TYPE: PRT
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Peptide
139 <400> SEQUENCE: 10
140 Glu Gly Ser Gly Ser Glu Asn Leu Tyr Phe Gln Gly Ser Gly Gly
141 1 5 10 15
144 <210> SEQ ID NO: 11
145 <211> LENGTH: 63
146 <212> TYPE: DNA
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: PCR Primer
152 <400> SEQUENCE: 11
153 ggcagcggat ctgagaacct gtacttccag gggtccgggt caacctttga agagagaagt 60
154 tac 63
156 <210> SEQ ID NO: 12
157 <211> LENGTH: 16
158 <212> TYPE: PRT
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Peptide
164 <400> SEQUENCE: 12
165 Gln Gly Ser Gly Ser Glu Asn Leu Tyr Phe Gln Gly Ser Gly Ser Lys
166 1 5 10 15
169 <210> SEQ ID NO: 13
170 <211> LENGTH: 66
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: PCR Primer
177 <400> SEQUENCE: 13
178 tctggatccg gtgaaaatct ctattttcag ggctcaggaa gtaaaaagtt caagaacagc 60
179 acctac 66
181 <210> SEQ ID NO: 14
182 <211> LENGTH: 17
183 <212> TYPE: PRT
184 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
187 <223> OTHER INFORMATION: Peptide
189 <400> SEQUENCE: 14
190 Glu Pro Asn Ser Phe Leu Lys Lys Ala Asp Ile Phe Ile Asn Gly Ser
191 1 5 10 15
192 Gln
196 <210> SEQ ID NO: 15
197 <211> LENGTH: 74

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,796

DATE: 03/29/2006

TIME: 09:49:42

Input Set : A:\ITR0060YP SEQLIST.TXT

Output Set: N:\CRF4\03292006\J572796.raw

```

198 <212> TYPE: PRT
199 <213> ORGANISM: Human
201 <400> SEQUENCE: 15
202 Gln Asp Val Val Asp Leu Asp Phe Phe Thr Gln Glu Pro Leu His Leu
203 1 5 10 15
204 Val Ser Pro Ser Phe Leu Ser Val Thr Ile Asp Ala Asn Leu Ala Thr
205 20 25 30
206 Asp Pro Arg Phe Leu Ile Leu Leu Gly Ser Pro Lys Leu Arg Thr Leu
207 35 40 45
208 Ala Arg Gly Leu Ser Pro Ala Tyr Leu Arg Phe Gly Gly Thr Lys Thr
209 50 55 60
210 Asp Phe Leu Ile Phe Asp Pro Lys Lys Glu
211 65 70
214 <210> SEQ ID NO: 16
215 <211> LENGTH: 386
216 <212> TYPE: PRT
217 <213> ORGANISM: Human
219 <400> SEQUENCE: 16
220 Lys Lys Phe Lys Asn Ser Thr Tyr Ser Arg Ser Ser Val Asp Val Leu
221 1 5 10 15
222 Tyr Thr Phe Ala Asn Cys Ser Gly Leu Asp Leu Ile Phe Gly Leu Asn
223 20 25 30
224 Ala Leu Leu Arg Thr Ala Asp Leu Gln Trp Asn Ser Ser Asn Ala Gln
225 35 40 45
226 Leu Leu Leu Asp Tyr Cys Ser Ser Lys Gly Tyr Asn Ile Ser Trp Glu
227 50 55 60
228 Leu Gly Asn Glu Pro Asn Ser Phe Leu Lys Lys Ala Asp Ile Phe Ile
229 65 70 75 80
230 Asn Gly Ser Gln Leu Gly Glu Asp Phe Ile Gln Leu His Lys Leu Leu
231 85 90 95
232 Arg Lys Ser Thr Phe Lys Asn Ala Lys Leu Tyr Gly Pro Asp Val Gly
233 100 105 110
234 Gln Pro Arg Arg Lys Thr Ala Lys Met Leu Lys Ser Phe Leu Lys Ala
235 115 120 125
236 Gly Gly Glu Val Ile Asp Ser Val Thr Trp His His Tyr Tyr Leu Asn
237 130 135 140
238 Gly Arg Thr Ala Thr Arg Glu Asp Phe Leu Asn Pro Asp Val Leu Asp
239 145 150 155 160
240 Ile Phe Ile Ser Ser Val Gln Lys Val Phe Gln Val Val Glu Ser Thr
241 165 170 175
242 Arg Pro Gly Lys Lys Val Trp Leu Gly Glu Thr Ser Ser Ala Tyr Gly
243 180 185 190
244 Gly Gly Ala Pro Leu Leu Ser Asp Thr Phe Ala Ala Gly Phe Met Trp
245 195 200 205
246 Leu Asp Lys Leu Gly Leu Ser Ala Arg Met Gly Ile Glu Val Val Met
247 210 215 220
248 Arg Gln Val Phe Phe Gly Ala Gly Asn Tyr His Leu Val Asp Glu Asn
249 225 230 235 240
250 Phe Asp Pro Leu Pro Asp Tyr Trp Leu Ser Leu Leu Phe Lys Lys Leu

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,796

DATE: 03/29/2006

TIME: 09:49:42

Input Set : A:\ITR0060YP SEQLIST.TXT

Output Set: N:\CRF4\03292006\J572796.raw

```

251          245          250          255
252 Val Gly Thr Lys Val Leu Met Ala Ser Val Gln Gly Ser Lys Arg Arg
253          260          265          270
254 Lys Leu Arg Val Tyr Leu His Cys Thr Asn Thr Asp Asn Pro Arg Tyr
255          275          280          285
256 Lys Glu Gly Asp Leu Thr Leu Tyr Ala Ile Asn Leu His Asn Val Thr
257          290          295          300
258 Lys Tyr Leu Arg Leu Pro Tyr Pro Phe Ser Asn Lys Gln Val Asp Lys
259 305          310          315          320
260 Tyr Leu Leu Arg Pro Leu Gly Pro His Gly Leu Leu Ser Lys Ser Val
261          325          330          335
262 Gln Leu Asn Gly Leu Thr Leu Lys Met Val Asp Asp Gln Thr Leu Pro
263          340          345          350
264 Pro Leu Met Glu Lys Pro Leu Arg Pro Gly Ser Ser Leu Gly Leu Pro
265          355          360          365
266 Ala Phe Ser Tyr Ser Phe Phe Val Ile Arg Asn Ala Lys Val Ala Ala
267          370          375          380
268 Cys Ile
269 385
272 <210> SEQ ID NO: 17
273 <211> LENGTH: 492
274 <212> TYPE: PRT
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: hep 106
280 <400> SEQUENCE: 17
281 Met Leu Leu Arg Ser Lys Pro Ala Leu Pro Pro Pro Leu Met Leu Leu
282 1          5          10          15
283 Leu Leu Gly Pro Leu Gly Pro Leu Ser Pro Gly Ala Leu Pro Arg Pro
284          20          25          30
285 Ala Gln Ala Gln Asp Val Val Asp Leu Asp Phe Phe Thr Gln Glu Pro
286          35          40          45
287 Leu His Leu Val Ser Pro Ser Phe Leu Ser Val Thr Ile Asp Ala Asn
288          50          55          60
289 Leu Ala Thr Asp Pro Arg Phe Leu Ile Leu Leu Gly Ser Pro Lys Leu
290 65          70          75          80
291 Arg Thr Leu Ala Arg Gly Leu Ser Pro Ala Tyr Leu Arg Phe Gly Gly
292          85          90          95
293 Thr Lys Thr Asp Phe Leu Ile Phe Asp Pro Lys Lys Phe Lys Asn Ser
294          100          105          110
295 Thr Tyr Ser Arg Ser Ser Val Asp Val Leu Tyr Thr Phe Ala Asn Cys
296          115          120          125
297 Ser Gly Leu Asp Leu Ile Phe Gly Leu Asn Ala Leu Leu Arg Thr Ala
298          130          135          140
299 Asp Leu Gln Trp Asn Ser Ser Asn Ala Gln Leu Leu Leu Asp Tyr Cys
300 145          150          155          160
301 Ser Ser Lys Gly Tyr Asn Ile Ser Trp Glu Leu Gly Asn Glu Pro Asn
302          165          170          175
303 Ser Phe Leu Lys Lys Ala Asp Ile Phe Ile Asn Gly Ser Gln Leu Gly

```

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/572,796

DATE: 03/29/2006

TIME: 09:49:43

Input Set : A:\ITR0060YP SEQLIST.TXT

Output Set: N:\CRF4\03292006\J572796.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No  
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:30 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1